# Paris Observatory (OPAR) Data Center

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**Abstract** This report summarizes the OPAR Data Center activities in 2015–2016. Included is information about functions, architecture, status, future plans, and staff members of OPAR Data Center.

#### 1 General Information

The Paris Observatory (OPAR) has provided a Data Center for the International VLBI Service for Geodesy and Astrometry (IVS) since 1999. The OPAR as well as CDDIS and BKG is one of the three IVS Primary Data Centers. Their activities are done in close collaboration for collecting files (data and analysis files), and making them available to the community as soon as they are submitted. The three primary Data Centers have a common protocol and each of them:

- has the same directory structure (with the same control file),
- has the same script,
- is able to receive all IVS files (auxilliary, database, products, documents),
- mirrors the other ones every three hours,
- gives free FTP access to the files.

This protocol gives the IVS community a transparent access to a Data Center through the same directory, and a permanent access to files in case of a Data Center breakdown.

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To be able to submit a file to a Data Center, Operational and Analysis Centers have to be registered by the IVS Coordinating Center. The file names have to conform to the name conventions. A script checks the file and puts it in the right directory. The script undergoes permanent improvement and takes into account the IVS components' requests.

#### 2 Current Status

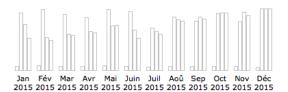
The OPAR Data Center is currently operated on a PC Server (PowerEdge 2800 - Xeron 3.0 GHz) located at Paris Observatory, and running the Fedora Linux operating system. To make all IVS products available online, the disk storage capacity was significantly increased and the server is equipped now with RAID 3 TB disk extensible up to 4.7 TB. The OPAR server is accessible 24 hours per day, seven days per week through Internet connection with 2 Mbit/s rate. Users can get the IVS products by using the FTP protocol. Access to this server is free for users.

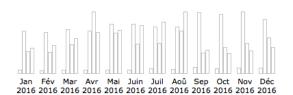
#### FTP access:

ivsopar.obspm.fr username : anonymous password : your e-mail cd vlbi (IVS directory)

### 3 Staff Members

Christophe Barache is in charge of the maintenance of the Data Center. For hardware issues, he is helped by Teddy Carlucci, who is one of the IT managers of





Mois	Visiteurs différents	Visites	Hits	Bande passante
Jan 2015	103	1283	215250	210.79 Go
Fév 2015	108	1359	153406	197.88 Go
Mar 2015	95	1250	169393	231.98 Go
Avr 2015	95	1177	182562	248.35 Go
Mai 2015	107	1358	207511	296.50 Go
Juin 2015	104	1311	188203	211.14 Go
Juil 2015	89	945	181742	237.60 Go
Aoû 2015	96	1188	235556	325.58 Go
Sep 2015	92	1101	248253	337.26 Go
Oct 2015	105	1264	269694	375.61 Go
Nov 2015	105	1079	273142	359.48 Go
Déc 2015	75	1360	286171	401.88 Go
Total	1174	14675	2610883	3434.04 Go

Mois	Visiteurs différents	Visites	Hits	Bande passante
Jan 2016	99	1219	160626	177.11 Go
Fév 2016	93	1188	155359	196.05 Go
Mar 2016	100	1258	208821	240.70 Go
Avr 2016	100	1235	445988	285.32 Go
Mai 2016	115	1420	295614	297.31 Go
Juin 2016	115	1427	214409	332.15 Go
Juil 2016	147	1336	218937	355.14 Go
Aoû 2016	137	1346	312163	422.34 Go
Sep 2016	195	1749	151625	163.87 Go
Oct 2016	152	1703	192788	138.47 Go
Nov 2016	170	1767	218350	158.08 Go
Déc 2016	171	1560	260044	179.19 Go
Total	1594	17208	2834724	2945.74 Go

Fig. 1 OPAR Data Center access statistics for (left) 2015 and (right) 2016.

the SYRTE department. Sébastien Lambert is in charge of the IVS activities at the SYRTE department including also the scientific management of the IVS Analysis Center.

To request more information about the OPAR Data Center please contact ivs.opa@obspm.fr

## **5 Future Plans**

The OPAR Data Center will be installed on a new server in March 2017 running Linux Debian 8.6.

# 4 Activities during the Past Years

The FTP access statistics for the last two years are shown in Figure 1.